

Rainwater Harvesting Compensation for excess impervious cover (IC)

Required:

1. Rain tank 2.6 times greater in gallons than number of square feet in excess of IC limit

This formula calculates the number of gallons required to provide flood mitigation plus a factor of safety

Example: 5,000 sq.ft. lot with 45% IC limit permitted by Code is granted a variance to build 46% IC

Therefore: $5,000 \times 0.45 = 2,250$ sq.ft. (Code) vs. $5,000 \times 46\% = 2,300$ sq.ft. (allowed by variance)

Therefore: $2,300 - 2,250 = 50$ sq.ft. over Code limit

Therefore: 50 sq.ft. over limit $\times 2.6 = 130$ gallon rain tank required (minimum)

Result: Applicant installs a 150-gallon rain tank or two 75-gallon rain barrels

2. Guttering installed on an area of roof in square feet at least as large as the number of gallons of the rain tank

Example: Applicant ensures that roof area draining at least 150 sq.ft. drains via gutters to the 150-gallon tank

Or two separate areas draining at least 75 sq.ft. each drain to rain gutters to the two rain barrels.

3. Outflow from tank directed to a safe drainage conveyance where won't adversely impact neighboring properties

Calculation Table

Impervious Cover sq.ft. overage	Minimum Gallons of Rain Tank Volume Required
50	130
100	260
200	520
300	780
400	1,040
500	1,300
600	1,560
700	1,820
800	2,080
900	2,340
1,000	2,600
2,000	5,200
3,000	7,800
4,000	10,400
5,000	13,000